EPA REQUIREMENTS AND GUIDANCE FOR STATE § 111(d) PLANS FOR MERCURY EMISSIONS FROM COAL-FIRED ELECTRIC STEAM GENERATING UNITS

Subpart B of 40 CFR Part 60 contains the requirements for the adoption and submittal of state plans for designated facilities. A designated facility is an existing facility that emits a designated pollutant, and which would be subject to a standard of performance for that pollutant if the existing facility were an affected facility. A designated pollutant means any air pollutant, emissions of which are subject to a standard of performance for new stationary sources but for which air quality criteria have not been issued, and which is not included on a list published under § 108(a) or § 112(b)(1)(A).

Adoption and submittal of state plans; public hearings.

Within 9 months after notice of the availability of a final revised guideline document is published, states must adopt their plans and make the official submittal to EPA. *[60.23 (a)]* The minimum requirements for the state to conduct public hearings on the adoption of state plans and any revisions to those plans are as follows:

1. One or more public hearing on the state plan (or revisions) conducted within the State. *[60.23(c)(1)]*

2. Reasonable notice of one or more public hearing at least 30 days prior to the hearings. *[60.23(d)]*

3. Date, time and place of hearings prominently advertised in each region affected. *[60.23(d)(1)]* ("Region" is defined as "air quality control region" in 40 CFR 60.21(i).)

4. Availability of draft state plan for public inspection in at least one location in each region to which it will apply. *[60.23(d)(2)]*

5. Notice of hearing provided to: (a) EPA Regional Administrator, (b) local affected agencies, and (c) other states affected. *[60.23(d)(3),(4), and (5)]*

6. Retention of hearing records (list of commenters and their affiliation and summary of each presentation and comments submitted and the state's responses to those comments) for at least 2 years. *[60.23(e) and (f)]*

7. Certification that public participation was conducted in accordance with Subpart B and state procedures. *[60.23(f)]* Upon written application by the state agency, EPA may, for limited special cases, approve different procedures provided that they ensure adequate public participation. *[60.23(g)]*

No hearing is required on a state or local emission standard in effect prior to the effective date of a standard, if it was adopted after a public hearing and is at least as stringent as the emission guideline. *[60.23(c)(3)]* Similarly, no public hearing is required for any

change to an increment of progress unless the change is likely to cause the facility to be unable to comply with the final compliance date. *[60.23(c)(2)]*

Emission standards and compliance schedules.

The state plan shall include the specific emission limitations, preferably cross-referenced to the specific requirements of the emission guidelines (EG). *[60.24(a)]*

Emission standards shall either be based on an allowance system or prescribe allowable rates of emissions except when it is clearly impracticable. *[60.24(b)(1)]*

Test methods and procedures for determining compliance shall be specified. *[60.24(b)2)]* If the methods and procedures are not identical to those in the EG, the state must demonstrate equivalence or request EPA approval of acceptable alternatives per current EPA method review procedures. *[60.24(b)(2)]*

Emission standards shall be no less stringent than the corresponding EG, and final compliance shall be required as expeditiously as practicable but no later than the compliance times specified by the EG. *[60.24(c)]*

Where the administrator has determined that a designated pollutant may cause or contribute to endangerment of public welfare but that adverse effects on public health have not been demonstrated, states may balance the EG, compliance times, and other information provided in the applicable guideline document against other factors of public concern in establishing emission standards, compliance schedules, and variances. Appropriate consideration shall be given to the factors specified in 60.22(b) and to information presented at the public hearing(s) conducted under 60.23(c). *[60.24(d)]*

Any compliance schedule extending more than 12 months from the date required for submittal of the plan must include legally enforceable increments of progress to achieve compliance for each designated facility or category of facilities. Unless otherwise specified in the applicable subpart, increments of progress must include, where practicable, each increment of progress specified in 60.21(h) and must include such additional increments of progress as may be necessary to permit close and effective supervision of progress toward final compliance. *[60.24(e)(1)]*

A plan may provide that compliance schedules for individual sources or categories of sources will be formulated after plan submittal. Any such schedule shall be the subject of a public hearing held according to 60.23 and shall be submitted to the administrator within 60 days after the date of adoption of the schedule but in no case later than the date prescribed for submittal of the first semiannual report required by 60.25(e). *[60.24(e)(2)]*

States may provide for the application of less stringent emissions standards or longer compliance schedules if the state demonstrates an unreasonable cost of control, the physical impossibility of installing necessary control equipment, or other factors that make application of a less stringent standard or final compliance time significantly more reasonable. *[60.24(f)]* Nothing in the Clean Air Act or the CFR restricts a state from having standards and schedules more stringent than the EG. *[60.24(g)]*

Each state may submit a state plan meeting the mercury rule requirements of paragraphs (h)(2) through (7) of this section. *[60.24(h)(1)]* The state plan must be submitted to the administrator by no later than November 17, 2006. Five copies of the state plan must be delivered to the appropriate regional office. *[60.24(h)(2)]*

The state plan shall contain emission standards and compliance schedules and demonstrate that they will result in compliance with the state's annual electrical generating unit (EGU) mercury budget for the appropriate periods: for 2010-2017, 0.592 tpy, and for 2018 and thereafter, 0.234 tpy. *[60.24(h)(3)]* The state plan shall require EGUs to comply with the monitoring, recordkeeping, and reporting provisions of 40 CFR Part 75 with regard to Hg mass emissions. *[60.24(h)(4)]*

In addition to meeting the requirements of 60.26, each state plan must show that the state has legal authority to adopt emissions standards and compliance schedules necessary for attainment and maintenance of the state's relevant annual EGU Hg budget, and require owners or operators of EGUs to meet the monitoring, recordkeeping, and reporting requirements. *[60.24(h)(5)]*

If a state adopts an allowance system that differs substantively from the EG, then such allowance system is not automatically approved and will be reviewed by the Administrator for approvability in accordance with the other provisions of paragraphs (h)(2) through (5) and the other applicable requirements for a state plan. The Hg allowances issued under such an allowance system shall not, and the state plan shall state that such Hg allowances shall not, qualify as Hg allowances under any approved allowance system. *[60.24(h)(7)]*

<u>Emission guidelines.</u>

The EG establish an Hg Budget Trading Program for Coal Fired Electric Steam Generating Units as a means of mitigating mercury emissions in order to reduce the regional deposition of mercury and its subsequent entry into the food chain. The EG address the following substantive provisions: applicability, permitting, allowance methodology, monitoring, banking, and compliance determination. The EG establish Hg annual trading budgets for each state; in the case of Virginia the budgets are 1,184 pounds in 2010 through 2017 and 468 pounds in 2018 and thereafter.

Beginning January 1, 2010, coal-fired electric generating units with a nameplate capacity greater than 25 MWe are subject to the provisions of the EG. To accommodate the Hg emissions from the affected units, the units are allocated from the budget a specific limited number of allowances (measured in tons per year) during the months of January 1 through December 31, otherwise know as the control period. The Hg allocations are determined through a methodology based upon heat input for existing units and electrical output for new units. January 1, 2001 is the cutoff for determining whether a unit is new or existing. If a unit does not use all of its allowances for a specific control period, those extra tons may be banked for future use or sold. If a unit exceeds the allocated allowances, additional allowances may be purchased or the source may use banked allowances to offset the amount of Hg generated above the allocated allowances.

Sources found to be out of compliance will be forced to surrender allowances for the next year on a ratio of 3:1; i.e., for every ounce over its allocations, three ounces will be forfeited from the next year's allocation.

Emissions will need to be monitored according to 40 CFR Part 75 of the Code of Federal Regulations for all sources subject to the regulation and for any sources wishing to opt into the program. *[40 CFR Part 60, Subpart HHHH]*

Emission inventories, source surveillance, reports.

The state plan must include an emission inventory of all designated pollutants for all designated facilities. Such data shall be summarized in the plan, and emission rates shall be correlated with applicable emission standards. *[60.25(a)]*

The plan must provide for monitoring the status of compliance, and shall include, as a minimum:

1. Provisions for legally enforceable procedures to: (a) require recordkeeping on nature and amount of emissions and reports to the state; and (b) require any additional information to judge compliance. *[60.25(b)(1)]*

2. Provisions for periodic inspection and testing, if necessary. *[60.25(b)(2)]*

3. Provisions for emission data and other compliance monitoring information to be correlated with applicable emission standards and be made available to the public. "Correlated" means showing the relationship between the measured or estimated amounts of emissions and the amounts of such emissions allowable. For example, the emissions should be in the same units and averaging times. *[60.25(a) and (c)]*

4. Specific identification of the above four provisions. Copies of such provisions should be included unless they have been approved as portions of a preceding § 111(d) state plan or SIP and the state demonstrates that the provisions are applicable and the requirements of 60.26 (legal authorities) are met. *[60.25(d)]*

5. Commitment to submit reports on progress in plan enforcement to the EPA Regional Administrator on an annual basis and include it in the reports required by 51.321. *[60.25(e) and (f)]* Each progress report shall include: enforcement actions, achievement of increments of progress, identification of sources that have ceased operation, emission inventory information for sources that were not in operation at the time of plan development, updated emission inventory and compliance information, and copies of technical reports on all performance testing, including concurrent process data. *[60.25(f)(1) through 60.25(f)(6)]*

Legal Authority

The state plan shall include demonstration of the state's legal authority to:

1. adopt emission standards (enforceable conditions) and compliance schedules

applicable to the designated facilities and designated pollutants for which the state plan is submitted;

2. enforce applicable laws, regulations, standards, and compliance schedules, and seek injunctive relief;

3. obtain information necessary to determine compliance;

4. require recordkeeping, make inspections, and conduct tests;

5. require the use of monitors and require emission reports of owners or operators; and

6. make emission data publicly available. *[60.26(a)]*

The state must specifically identify the provisions above and include copies of the provisions of the law establishing such legal authority unless they have been approved as a portion of a previous SIP. EPA encourages states to submit an opinion by the state's Attorney General as part of the demonstration required above. States may use previously submitted Attorney General opinions to the extent those documents specifically address the requirements of 40 CFR 60.26 as they apply to the designated facilities and the designated pollutants. *[60.26(b)]*

The legal authority shown must be in effect at time of plan submission. *[60.26(c)]*

The state may authorize another state governmental agency or local agency to carry out a portion of the plan, provided the state demonstrates that the other agency has adequate authority to implement that portion of the plan and the state is not relieved of responsibility. *[60.26(e)]*